State of Utah DEPARTMENT OF NATURAL RESOURCES	Ref: NR-18-A-16	Page: 1 of 3
	Effective Date: 05/23/2018	Revision Date:
POLICIES & PROCEDURES - *Administration*	Subject: **Unmanned Aerial Systems (UAS)**	
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I. PURPOSE

The purpose of this policy is to identify the uses of, and the operational requirements for, Unmanned Aerial Systems (UAS) used by DNR division staff, other department personnel or UAS contractors hired by DNR. Compliance with this policy helps to ensure that DNR UAS operations are a responsible and transparent use of this technology and promote safety, privacy and accountability. Through careful and innovative use of UAS, DNR seeks to produce substantial benefits such as improved site inspections, employee safety, workflow efficiency, more effective surveys/mapping and expedited information gathering for quicker and better decision-making. This policy sets the department's expectations for UAS use, operations and conduct that complement FAA regulations for UAS operations.

II. DEFINITIONS

UAS - A small unmanned aircraft system is an unmanned aircraft (UAV) and the equipment necessary for the safe and efficient operation of that aircraft. An unmanned aircraft is a component of a UAS. It is defined by statute as an aircraft that is operated without the possibility of direct human intervention from within or on the aircraft. UAS can sometimes be referred to as sUAS with the additional "s" referring to "small".

UAV - An unmanned aerial vehicle (UAV) is an aircraft piloted by remote control or on board computers and weighing less than 55 pounds, including everything that is onboard or otherwise attached to the aircraft.

Visual Observer - A trained person who assists the unmanned aircraft pilot in the duties associated with collision avoidance. This includes, but is not limited to, avoidance of other traffic, clouds, obstructions and terrain.

Pilot in Command (PIC) - A trained and certified pilot who controls the UAS.

DNR UAS Resource - Any UAS equipment purchased or used by any DNR division or program and the DNR staff resources required to maintain and operate the UAS. This also includes any enterprise (department-wide) systems that help implement UAS technology such as data/image processing software, UAS management applications, data analysis, UAS pilot training assets and other UAS operational support functions/assets.

III. POLICY

A. Appropriate UAS Use –

1. The operational use of UAS by any DNR employee or contractor shall only be for the purpose of advancing the work of natural resource management consistent with the missions of DNR divisions and the responsibilities of the department.

2. To the extent that DNR UAS resources may be requested by federal, state, or local government agencies to aid in the mission of disaster response or search and rescue, DNR employees and DNR UAS resources may engage in operations that fulfill such a request.

The UAS operator shall notify the Executive Director or designee afterwards and enter the operation(s) as a UAS aid mission in the flight log.

3. It is permissible to use DNR UAS resources to train current and future DNR UAS pilots or persons not employed by DNR for which reimbursement for such training may be required.

4. It is not permissible to use DNR UAS resources for purposes not mentioned above and especially for any non-department or personal-benefit purpose. Proposed UAS operations that are not clearly defined above, shall be fully described and a request made to the DNR Executive Director or the designee for department approval prior to any operational flight.

5. Failure of any DNR employee or UAS contractor to comply with this policy and applicable FAA regulations could expose the DNR employee or contractor to personal liability, personal civil or criminal penalties and department disciplinary actions.

IV. PROCEDURES

A. No DNR employee shall operate a UAS, outside of a DNR approved UAS training environment, without first obtaining an FAA Remote Pilot Certification (for small unmanned aerial systems, (sUAS)). This pilot certification requirement and other mandatory UAS actions are identified in FAA regulations under Title 14 of the Federal Regulations (14 CFR), Part 107 and applicable portions of 14 CFR, Part 61 and hereby incorporated into this DNR policy by reference. It is the expectation that all DNR UAS operators and flight operations are fully compliant with applicable FAA regulations.

B. In order to ensure FAA compliance, address UAS legal and operational risks, and establish a pattern of behavior, all DNR UAS pilots shall utilize a pre-flight check list to ensure UAS equipment, personnel, and the environment are safe and appropriate for the planned UAS operation and that FAA compliance is satisfied relative to applicable notifications, authorizations and waivers.

C. All DNR UAS pilots shall complete a flight log entry of all UAS flights. Fulfilling this expectation will provide for transparency of our operations, identification of risk factors, and build a body of knowledge that contributes to a sustainable UAS operation.

D. DNR employees are prohibited from using privately owned UAS for department business without prior approval by the department Executive Director or their designee.

E. Contracted UAS operations shall comply with this DNR UAS Operations Policy and Procedures.

F. UAS Pilots will employ reasonable precautions to avoid capturing images/data of the public in areas where there is an expectation for privacy. DNR UAS pilots will complete a thorough review of the flight plan prior to flight to determine if privacy is a potential issue and take measures to eliminate or minimize privacy conflicts.

G. DNR UAS investment and activity will continue to grow; therefore, DNR considers our UAS program to be a critical enterprise system benefiting all DNR divisions and helping to fulfill our department mission. With that in mind, governance over DNR UAS-related matters will receive management attention via the following means:

1. An eight member UAS Working Group (one member per division and one from DNR Administration) will be created and maintained for the purpose of reviewing and recommending DNR UAS Operational Procedures, pre-flight checklist, as well as other UAS solutions (in-house or contracted services) that can provide positive outcomes.

2. Each DNR Division Director will assign a member of their division to be the UAS Working Group member/representative. The Department Executive Director will assign the DNR Administration member. These appointed members will be responsible for:

   a. The execution of their division's UAS operations

   b. Compliance with DNR UAS Operations Policy and Procedures and all applicable FAA requirements,

   c. UAS-related state contracting/procurement,

   d. Reporting any and all UAS issues and accidents to the UAS Working Group and their Division Director or designee,

   e. Active participation on the UAS Working Group

3. DNR UAS program oversight will be the responsibility of the UAS Program Lead. This person will be determined by, and report to, the DNR Executive Director or their designee. The UAS Program Lead will coordinate the UAS Working Group, take Working Group recommendations to the Executive Director or designee for approval, and ensure the UAS enterprise system is operating properly and delivering organizational benefit.

4. UAS investments will be made to increase DNR capabilities and produce positive outcomes; therefore, it is expected that such investments and their results will be monitored and documentation created that can identify the return on investment and other tangible benefits.